

1. What is our purpose?

To inquire into the following:

Transdisciplinary theme:

How the world works

An inquiry into the natural world and its laws; the interaction between the natural world (physical and biological) and human societies; how humans use their understanding of scientific principles; the impact of scientific and technological advances on society and on the environment.

- **central idea**

All living things go through a process of change

Summative assessment task(s):

What are the possible ways of assessing students' understanding of the central idea? What evidence, including student-initiated actions, will we look for?

The children will be asked to either draw or uses manipulatives eg play –dough, create a mobile, talk or perform (role play) the assessment task. They will be required to show three key stages of change within a chosen living thing's life cycle.

What – changes occur within life cycles

Why. – part of growth, understanding of own development

How – Demonstrate understanding of key stages of change within chosen things living cycle. Compare similarities and differences between another peers life cycle. Children can present this through play doh, mobile, talk or a performance.

Class/grade: D4

Age group:

School: Sample

School code:

Title: Life Cycles

Teachers:

Date: October 2012

Proposed duration: Term 2- 9 weeks



PYP planner

2. What do we want to learn?

What are the key concepts (form, function, causation, change, connection, perspective, responsibility, reflection) to be emphasized within this inquiry?

[Change](#)

[Connection](#)

[Form](#)

Related Concepts:

[Growth, cycles and relationships](#)

What lines of inquiry will define the scope of the inquiry into the central idea?

[The life cycle of different living things](#)

[Connections and differences between life cycles.](#)

What teacher questions/provocations will drive these inquiries?

What are living things? (Form)

Is this a living thing? Why / Why not?

What is a life cycle? (Change)

How do living things change and grow?

How are life cycles similar / different?

What supports the life cycle? (Connection)

What do all living things need? Why will it grow or not grow?

What would happen if ... what will happen next?

Learner Profile Focus

- Caring, Principled and open-minded

3. How might we know what we have learned?

This column should be used in conjunction with “How best might we learn?”

What are the possible ways of assessing students’ prior knowledge and skills?
What evidence will we look for?

Pre-Assessment

Children to sort pictures into groups of living and non-living things and to be able to explain their reasons for placement of these pictures.

What are the possible ways of assessing student learning in the context of the lines of inquiry? What evidence will we look for?

Formative Assessment

Give them modeling clay and ask them to make the stages of a life cycle they have learn about and explain.

Summative Assessment

The children will be asked to either draw or uses manipulatives eg play –dough, create a mobile, talk or perform the assessment task. They will be required to show three key stages of change within a chosen living thing's life cycle.

5. What resources need to be gathered?

What people, places, audio-visual materials, related literature, music, art, computer software, etc, will be available?

Books, posters, DVD’s, picture boards, inquiry table, living creatures, a variety of seeds, puzzles, internet, online games, parents, magnifying glasses, microscope all on-going preschool stations like house, play-doh, paint, stencils, paper and art supplies etc. See lists of resources related to this unit.,

How will the classroom environment, local environment, and/or the community be used to facilitate the inquiry?

Classroom: inquiry table, water tray for tadpoles and frogs, area for plants to grow, picture boards, group discussions and visual cues.

Local environment: Used to explore to discover living things in their natural environment and to ‘share’ what was growing in all early years classrooms

4. How best might we learn?

What are the learning experiences suggested by the teacher and/or students to encourage the students to engage with the inquiries and address the driving questions?

- Walk around the school and the community looking for things that are living or non- living.
- Free exploration of a variety of artifacts, books, puzzles, posters and pictures pertaining to life cycles. Listen to questions, comments and connections students make and how they use items to play. May ask “what do you see, what do you think may happen and share ‘I wonder’ types of questions to encourage students to orally express their thinking and asking what they want and need.
- Looking at ourselves and how we have changed and bring in photos of the students as a baby and a toddler and a copy of a parent photo. Activity: match child’s photos to adult photos noting the similarities between the child and the adult photos.
- Having frogs and tadpoles in the classroom to watch how they undergo their life cycle. Visiting other classrooms periodically to see how their living things have changed.
- Use the internet to watch different life cycles. Provide science tools and writing paper for students to draw and communicate observations. (some Level 1 PM Readers relate to this topic too.)
- Planting beans, let some grow inside, some outside, with/without water etc.
- Grow sweet potatoes and beans in the classroom. Children discuss daily changes in their plants and record their findings in their growth log.
- The children draw pictures of the cycles they liked best.
- Parents visit and tell stories about life cycles

What opportunities will occur for transdisciplinary skills development and for the development of the attributes of the learner profile?

The children will develop their research skills, by formulating questions and then watching and waiting for answers. Their communication skills will be developed through presentation of their summative task. Their thinking skills will be developed through gaining facts about different life cycles.

6. To what extent did we achieve our purpose?

Assess the outcome of the inquiry by providing evidence of students' understanding of the central idea. The reflections of all teachers involved in the planning and teaching of the inquiry should be included.

Interest shown in the UOI supported by children bringing books from home and living things eg tadpoles, snails, spiders and caterpillar.

Good support from parents in sending in photos of child's development and adult family photos.

The children are able to construct or draw the life cycle of their choice. Describing the different stages of growth and change.

How you could improve on the assessment task(s) so that you would have a more accurate picture of each student's understanding of the central idea.

Reword the Formative Assessment task as it was too similar to the Summative Assessment.

What was the evidence that connections were made between the central idea and the transdisciplinary theme?

They acknowledge that living things around them go through a process of change. It became clear as the children watched the changes that occurred with the tadpoles and growing up seeds and plants as well as identifying their friends from their baby photos.

Attitudes

Appreciation and respect

7. To what extent did we include the elements of the PYP?

What were the learning experiences that enabled students to:

Key Concepts

- *develop an understanding of the concepts identified in "What do we want to learn?"*
- **Change:** Having living things within the classroom helped the children develop their understanding of change, as they saw it in action it in action. Children talked about the changes they saw and drew changes that took place through a visual diary. The summative assessment task also worked as an opportunity for children to express their understanding of change. The children talked a lot about growing up and getting older and the types of things that happen to people at different stages of life. Such as getting taller, having babies etc
- **Connection:** Through their own inquiry the children learnt that their actions (not giving the plants water) affected other living things. They also saw this through either the lack of or presence of sun, food and water on living things.
- **Form:** the children able to identify the differences between the living and non-living things and understand that the life cycle represent change that living things go through.

Transdisciplinary Skills

The children developed their research skills (observing, collecting and recording data), by formulating questions and then watching and waiting for answers. Their communication skills (listening and speaking) developed through presentation of their summative task. Their thinking skills (acquisition of knowledge and comprehension) developed through gaining facts about different life cycles.

Learner Profile

. Caring, Open-Minded, Principled

Children were able to identify the types of action that supported growth and change (Caring). They talked about how their actions to care for plants had an impact and reflected on the care their parents give them and how this supports their growth and change. Children had to consider why some plants and frogs did not survive in some environments.

Open-Minded

Children began to think and be open-minded to how living things grow and change in different ways at similar stages. That not all froglets were the same and not all 4 year olds are exactly the same etc.

Principled

Act with the strong sense of fairness and respect for living things..

8. What student-initiated inquiries arose from the learning?

Record a range of student-initiated inquiries and student questions and highlight any that were incorporated into the teaching and learning.

- How do trees breathe?
- What is a cocoon?
- What is a baby spider called?
- What is baby frog called?
- Why doesn't baby frog look like its mum?
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At this point teachers should go back to box 2 "What do we want to learn?" and highlight the teacher questions/provocations that were most effective in driving the inquiries.

What student-initiated actions arose from the learning?

Record student-initiated actions taken by individuals or groups showing their ability to reflect, to choose and to act.

Children initiated discussions about life cycle puzzles they completed and constructed life cycles using play-dough.

Children brought in photos of themselves showing the different stages of their life cycle.

Caring for the living things in the classroom.

9. Teacher notes

The Unit was completed in a busy term with other important events including *The World Celebrates*, Teachers Day and Walk n Wheels a thon but despite this it was still a well constructed unit that encouraged the children to inquire into various aspects of growth & change that occurs amongst living things.

This year, more resources are visible in the classroom as what we ordered from last year were provided.